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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HUYNH, SON P

ART UNIT PAPER NUMBER

2611

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/365,734

Applicant(s)

COOPER ET AL.

Examiner

Son P Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-105 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-105 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 05 December 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-105 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 64 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation as claimed is unclear. Examiner interprets it as the set top device of claim 57.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 9-15, 17, 19-26, 28-30, 32, 34-49, 51-57, 59, 61-68, 70-72, 74, 76-84, 86-89, 91-95, 97, 99-104 are rejected under 35 U.S.C. 102(e) as being anticipated by Wistendahl et al. (US 6,496,981).

Regarding claim 1, Wistendahl et al. (hereinafter referred to as Wistendahl) teaches a computer implemented method of providing interactive links in TV programming, the method comprising: receiving a TV signal including a graphic symbol (buttons A1, A2, A3, A4, A5); generating an active region corresponding to the graphic symbol; and triggering a predetermined action associated with the active region in response to viewer input (see figures 2- 3, 7a-7b and col. 14, line 25-col. 16, line 21).

Regarding claim 2, Wistendahl teaches the received TV signal comprises TV picture data (video content) having the graphic symbol (buttons A1, A2) embedded therein (see figures 7a-7b and col. 14, lines 56-67).

Regarding claim 3, Wistendahl teaches the graphic symbol in the TV signal is specified by a broadcaster (authoring system) of the TV signal (see col. 9, line 58-col. 12, line 50).

Regarding claim 4, Wistendahl teaches receipt of the TV signal (media content) comprises receiving information defining the active region (coordinate locations of the buttons) to be generated (see col. 15, lines 1-6).

Regarding claim 5, Wistendahl teaches a user can select "hot spots" appearing in the display to trigger further developments. The IDM program responds to user selection of "hot spots" by launching further layers of display presentations and/or triggering other program functions (see col. 5, lines 42-50). Inherently, Wistendahl teaches receipt of the TV signal comprises receiving information defining the predetermined action to be triggered.

Regarding claim 6, Wistendahl teaches a user can select "hot spots" appearing in the display to trigger further developments. The IDM program responds to user selection of "hot spots" by launching further layers of display presentations and/or triggering other program functions, such as launching another application, initiating the operation of another system, or connecting to an external network such as a World Wide Web page or service on the Internet (see col. 3, lines 36-45; col. 5, lines 42-50). Inherently, generation of the active region corresponding to the graphic symbol comprises generating a webpage having a link to a resource.

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Regarding claim 7, Wistendahl teaches the active region is substantially in registration with the graphic symbol received in the TV signal (see figure 7a and col. 5, lines 27-50).

Regarding claim 9, Wistendahl teaches the active region roughly approximates the size, shape and/or location of the received graphic symbol (see figure 7a).

Regarding claim 10, Wistendahl teaches the set top box processor uses the object mapping data to highlight the display of interactive objects (see col. 3, lines 65-66, col. 14, lines 36-38, and figure 7a). As a result, the generated active region is visually transparent to the viewer.

Regarding claim 11, Wistendahl teaches the generated active region may be image objects, and/or buttons (see col. 3, lines 59-67). Inherently, the generated active region is visible to the viewer.

Regarding claim 12, Wistendahl teaches active region may be buttons overlaid on the TV content as enhanced media content (see col. 3, lines 65-67 and figure 7). Inherently, the visible active region is translucent.

Regarding claim 13, Wistendahl teaches the set top box processor uses the object mapping data to highlight the display of interactive objects appearing in the V

content and to perform an interactive function when the viewer toggles through the highlighted objects and press a control key to select a particular object (see col. 3, lines 59-63 and figure 7). Inherently, the visible active region enhances an appearance of the received graphic symbol.

Regarding claim 14, Wistendahl teaches the hot spots may be image objects, non- images objects or buttons overlaid on the TV contents as enhanced media content (see col. 3, lines 64-67 and figure 7a). Inherently, the visible active region serves as a visual cue to the viewer that the active region is available.

Regarding claim 15, Wistendahl teaches the set top processor uses the object mapping data to highlight the display of interactive objects appearing in the TV content and to perform an interactive function when the viewer toggles through the highlighted objects and presses a control key to select a particular object (see col. 3, lines 59-63; and as the viewer toggles through the options, the halo H is brightened, as shown with highlighted halo H' for button A5, in order to identify the currently toggled button for the viewer (see col. 14, lines 39-45). Inherently, generation of the active region comprises modifying an appearance of the active region.

Regarding claim 17, Wistendahl teaches when user toggles to an active region (halo H), the toggled halo is brighten in order to identify the current toggled button for

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the viewer (see col. 14, lines 39-47). Inherently, the active region's appearance changes based on a current context (current toggled button).

Regarding claim 19, Wistendahl teaches the set top processor uses the object mapping data to highlight the display of interactive objects appearing in the TV content and to perform an interactive function when the viewer toggles through the highlighted objects and presses a control key to select a particular object (see col. 3, lines 59-63; and as the viewer toggles through the options, the halo H is brightened, as shown with highlighted halo H' for button A5, in order to identify the currently toggled button for the viewer (see col. 14, lines 39-45). Inherently, the active region's appearance changes in response to an event (user toggles through the region).

Regarding claim 20, Wistendahl teaches the event comprises detecting that a viewer has indicated interested in the active region – viewer toggles through the region- (see col. 14, lines 39-45).

Regarding claim 21, Wistendahl teaches the event comprises detecting that a viewer has selected the active region (see col. 14, lines 45-55).

Regarding claim 22, Wistendahl teaches the toggled halo H is brightened (see col. 14, lines 39-45). Inherently, the modification of the active region's appearance comprises changing the color of the active region.

Regarding claim 23, Wistendahl teaches the viewer input that triggers the predetermined action comprises selection of the active area (see col. 5, lines 41-50).

Regarding claim 24, Wistendahl teaches triggering the predetermined action comprises accessing a resource linked to the active region (see col. 5, lines 41-50).

Regarding claim 25, Wistendahl teaches the accessed resource comprises a webpage (see col. 5, lines 41-50).

Regarding claim 26, Wistendahl discloses movie is rendered interactive so that the user can play trivia games or spark conversations in conjunction with the running of the movie (see col. 8, lines 34-36, col. 13, lines 50-62). Inherently, the accessed resource comprises a communication utility that enables the viewer to communicate with others.

Regarding claim 28, Wistendahl teaches the accessed resource comprises a local function (other program functions-see col. 5, lines 42-48).

Regarding claim 29, Wistendahl teaches the local function comprises a TV or VCR control operation (see col. 9, lines 11-55).

Regarding claim 30, Wistendahl teaches prior to triggering the predetermined action, modifying predetermined action associated with the active region (see col. 9, lines 11-26, col. 14, lines 39-55).

Regarding claim 32, Wistendahl teaches when user toggles to an active region (halo H), the toggled halo is brighten in order to identify the current toggled button for the viewer (see col. 14, lines 39-47). Inherently, the active region's appearance changes based on a current context (current toggled button).

Regarding claim 34, Wistendahl teaches the set top processor uses the object mapping data to highlight the display of interactive objects appearing in the TV content and to perform an interactive function when the viewer toggles through the highlighted objects and presses a control key to select a particular object (see col. 3, lines 59-63; and as the viewer toggles through the options, the halo H is brightened, as shown with highlighted halo H' for button A5, in order to identify the currently toggled button for the viewer (see col. 14, lines 39-45). Inherently, the predetermined action is changed in response to an event (user toggles through the region).

Regarding claim 35, Wistendahl teaches the event comprises detecting that action performed by the viewer— viewer toggles through the region- (see col. 14, lines 39-45).

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Regarding claim 36, Wistendahl teaches viewer selects a particular active region to access to an associated resource (see col. 14, lines 45-55). Inherently, the modification of the predetermined action comprises changing an address (select another active region) of a link associated with the active region to specify a different resource.

Regarding claim 37, Wistendahl teaches the TV signal includes a plurality of graphic signals within a TV frame (see figures 1 and 7a).

Regarding claim 38, Wistendahl teaches generating a separate active region for each graphic signal (see col. 10, line 20-col. 11, line 30).

Regarding claim 39, Wistendahl teaches each active region links to a predetermined source (see col. 9, lines 28-55). Inherently, each active region has its own associated predetermined action.

Regarding claim 40, Wistendahl discloses when user can select an active region to trigger the source associated with the selected active region (see col. 9, lines 28-55). Inherently, Wistendahl teaches triggering a separate predetermined action (predetermined source) for each active region.

Regarding claim 41, Wistendahl teaches information defining the active region (hot spots data) is received in during the vertical blanking interval of the TV signal (see col. 14, lines 60-67).

Regarding claim 42, Wistendahl teaches the information defining the active region is specified prior to receiving the TV signal (see col. 15, lines 25-38).

Regarding claim 43, Wistendahl teaches a set top device to provide interactive links in television (TV) programming, the set top device comprising:

- an interface for communications links to receive TV signals, the TV signals including one or more frames comprising an embedded graphic symbol (embedded buttons A1, A2,);
- a monitor output 34 to provide a display of the received TV signals including one or more frames comprising the embedded graphic symbol;
- an input 36 to receive user input from a viewer; and
- a processor to generate an active region corresponding to the graphic symbol, and to trigger a predetermined action associated with the active region in response to viewer input (see figures 3-4);

Regarding claims 44-49, 51-57, 59, 61-68, 70-72, 74, 76-84, the limitations of the set top device as claimed correspond to the limitations of the method as claimed in

claims 2-7, 9-15, 17, 19-26, 28-30, 32, 34-42 and are analyzed as discussed with respect to claims 2-7, 9-15, 17, 19-26, 28-30, 32, 34-42.

Regarding claim 86, Wistendahl teaches a method of providing interactive links in TV programming, the method comprising:
receive a TV signal (media content)
receiving data corresponding a graphic symbol (hot spots data);
generating a TV picture from the TV signal;
generating an active region corresponding to the graphic symbol in the TV picture; and
triggering a predetermined action associated with the active region in response to viewer input (see col. 3, lines 31-67; col. 5, lines 10, 57 and figures 7a-7b).

Regarding claims 87-89, 91-95, 97, 99-104, the limitations as claimed correspond to the limitations of the method as claimed in claims 4-6, 9-13, 17, 19, 22-26 and are analyzed as discussed in the rejection of claims 4-6, 9-13, 17, 19, 22-26.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

7. Claims 8, 18, 33, 50, 60, 75, 85, 90 and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wistendahl et al. (US 6,496,981).

Regarding claim 8, Wistendahl teaches a method as discussed in the rejection of claim 1. Wistendahl further discloses video editing software sold under the name ELASTIC REALITY 3 TM has shape creation and composting tools which can outline a shape in an image field and store the shape data as a separate file (see col. 10, lines 15-19); and the author can draw an outline around an object in the image field using a pointer or other cursor device (see col. 10, lines 40-55). It is obvious to one of ordinary skill in the art to generate the active region has same size, shape and at a same location as the received graphic symbol (buttons A1, A2) in order allow viewer to exactly selects access the link associated with the selected symbol graphic.

Regarding claim 18, Wistendahl teaches a method as discussed in the rejection of claim 17. Wistendahl further teaches the active region is brightened when viewer toggles through it (see col. 14, lines 39-45). Wistendahl further discloses viewer can select a hot spot to connect to an external network such as World Wide Web page or service on the Internet (see col. 5, lines 45-50). However, Wistendahl does not specifically disclose a first context correspond to a first state in which a set top device is logged into an online service provider host system and a second context corresponds to a second state in which the set top device is not logged into the online service provider

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host system. Official Notice is taken that indicating logged into service provider and not logged into service provider is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wistendahl to incorporate the well-known feature in the art in order to indicate connection status to viewer.

Regarding claim 33, the limitations as claimed correspond to the limitations as claimed in claim 18 and are analyzed as discussed in the rejection of claim 18.

Regarding claims 50, 60 and 75, the limitations of the set top device as claimed correspond to the limitations of the method as claimed in claim 8 and are analyzed with respect to claims 8, 18, 33.

Regarding claim 85, the limitations of the software correspond to the limitations of method as claimed in claim 1. It would have been obvious to one of ordinary skill in the art to embody the procedure of Wistendahl discussed with respect to claim 1 in order that a processor could be performed the instructions automatically.

Regarding claims 90, 98 the limitations as claimed correspond to the limitations of claims 8 and are analyzed as discussed with respect to claims 8, 18.

8. Claims 16, 31, 58, 73 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wistendahl et al. (US 6,496,981), and in view of Klappert et al. (US 6,256,785).

Regarding claim 16, Wistendahl teaches the method as discussed in the rejection of claim 15. Wistendahl further discloses the halo is brightened when user toggles through the halo (see col. 14, lines 39-45). However, Wistendahl does not specifically disclose the active region's appearance is modified in response to the passage of time.

Klappert discloses when the screen is changed, and according the hot spots are changed, the new hot spot information must be synchronized with the underlying video. This is accomplished by a synchronization time (see col. 5, lines 42-62). Inherently, the active region's appearance is modified in response to the passage of time. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wistendahl to incorporate the feature as taught by Klappert in order to provide an update active region to viewer.

Regarding claim 31, the limitations as claimed correspond to the limitations as claimed in claim 16 and are analyzed as discussed with respect to claim 16.

Regarding claim 58, the limitations of the set top device as claimed correspond to the limitations of the method as claimed in claim 16 and are analyzed as discussed with respect to the rejection of claim 16.

Regarding claim 73, the limitations of the set top device as claimed correspond to the limitations of the method as claimed in claim 31 and are analyzed as discussed with respect to the rejection of claim 31.

Regarding claim 96, the limitations as claimed correspond to the limitations as claimed in claim 16 and are analyzed as discussed with respect to the rejection of claim 16.

9. Claims 27, 69, and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wistendahl et al. (US 6,496,981), and in view of Alexander et al. (US 6,177,931).

Regarding claim 27, Wistendahl teaches a method as discussed in the rejection of claim 26. However, Wistendahl does not specifically disclose the communications utility comprises: an email program, or an instant messaging program, or a chat program.

Alexander discloses viewer can select an icon to link to chat room or sending e-mail (see col. 6, line 15, and col. 8, lines 61-64). Inherently, the communications utility comprises: an email program, or a chat program. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wistendahl to incorporate the feature as taught by Alexander in order to allow viewers to communicate to each other.

Regarding claim 69, the limitations of the set top device as claimed correspond to the limitations of the method as claimed in claim 27 and are analyzed as discussed with respect to the rejection of claim 27.

Regarding claim 105, the limitations as claimed correspond to the limitations as claimed in claim 27 and are analyzed as discussed with respect to the rejection of claim 27.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Portuesi (US 5,987,509) teaches system and method for displaying active uniform network resource locators during playback of media file or media broadcast.

Chenock et al. (US 6,177,930) teaches system and method for enabling a user to move between cyclically transmitted image streams.

Machida et al. (US 6,035,304) teaches system for storing and playing a multimedia application adding variety of services specific thereto.

Fries (US 6,317,885) teaches interactive entertainment and information system using television set top box.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P Huynh whose telephone number is 703-305-1889. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is 703-306-0377.

Son P. Huynh
February 7, 2003


CHRIS GRANT
PRIMARY EXAMINER